

On the Mechanical and Electrical Excitability of the Cerebral Cortex of Man through the Cranial Walls. By Dr. B. SILVA, *Rivista Clinica*, Dec., 1885.

Dr. Silva, in this and in a preceding paper, calls the attention to a new phenomenon observed by him, to which he has given the name "*fenomeno Rolandico*." The phenomenon of Rolando is the muscular contraction of a part which is excited by percussion through the cranium of the psycho-motor centres, and also by the use of electricity. For example, by the stroke of a small hammer upon a pleximeter of the left temporal region, corresponding to the cortical centre of the upper extremity, there will be produced a slight movement of the forearm upon the arm, and contemporaneously a slight movement of pronation of the forearm with the adduction of the thumb. If percussion is employed over the centres for the lower extremity, there will be a slight contraction of the quadriceps extensor femoris, of the tibialis anticus, and a less pronounced movement of the gastrocnemius. The excitation is proportioned to the extent of the blow, and on the opposite side of the body from the side of the cranium percussed.

The same phenomenon is observed with the faradic or galvanic current. The writer has demonstrated by means of myograms, which accompany the article, that there is always a latent period 0.15" in length.

GRACE PECKHAM.

Compulsory Movements Following Destruction of Cortex. By PROF. W. BECHTEREW, of St. Petersburg. *Virchow's Arch.*, vol. c., p. 473, 1885.

Prof. Bechterew is quite right in declaring that although Goltz, Trepier, and others, observed circus-movements and other forced movements following upon experimental destruction of certain cortical areas, but little attention had been paid to the subject hitherto. By physiological experiments Prof. Bechterew claims to have proven that circus-movements follow upon the destruction of an area corresponding to the parietal convolutions of man, and that such forced movements are similar to those which are produced by destruction of the organs of equilibrium. The author believes furthermore that these compulsory movements are irritation-symptoms, and may therefore be produced by destruction of the neighboring motor areas. Bechterew thinks (and he bases this opinion upon Flechsig's investigations) that there is good anatomical reason for assigning circus-movements to this area just caudad of the motor convolutions, for the superior peduncles joining the cerebellum and the cerebrum are seen to terminate in this parietal region of the cortex, and we know that destruction of the fibres of the superior cerebellar peduncles is followed by similar forced movements. The author cites in conclusion a number of pathological cases in which forced movements have been a prominent symptom, and refers in detail to a case which he himself had occasion to observe. The patient, a man of fifty-

four, had received some years ago a blow upon the head ; there was a distinct scar on the left side of the skull on the border between the parietal and occipital bones. The patient exhibited symptoms of dementia when he came under observation. He was seized suddenly with circus-movements ; he would always turn from right to left on being lifted out of bed and whenever he attempted any movement. In the sitting position the trunk and head would be turned several times in the direction which the circus-movements always took ; in the recumbent position these movements would not occur. He died of pleurisy a few months after these symptoms set in. The autopsy revealed local encephalitis of the parietal region, and an otherwise normal cortex, with the exception of a slight atrophy of the frontal convolution. This area of disease corresponded closely enough to the region which for physiological and anatomical reasons had been held responsible for these forced movements.

B. S.

Recherches Expérimentales sur le Tremblement dépendant de l' Ecorce grise des Hémisphères du Cerveau.
By J. GASTERNATZVY. *Progrès Médical*, 536, 1885.

In a former article published in 1881 G. showed that a lesion of a certain part of the antero-lateral columns of the spinal cord could produce a tremor analogous to that observed in disseminated sclerosis. In the present article he studies another kind of tremor, which cannot be produced by the above lesion,—a tremor dependent upon a lesion of certain parts of the brain. His experiments consisted in carefully applying a faradic current to the psychomotor zone of a dog. The conclusions arrived at were, that chloroform reduces the excitability of the cortex of the cerebral hemispheres and that then excitation of the psychomotor centres produces a tremor analogous to that observed in progressive paralysis of the insane. Various clinical features of this affection are then cited for the purpose of showing the similarity of the two tremors.

G. W. JACOBY.

PATHOLOGY OF NERVOUS SYSTEM.

On a Peculiar Group of Symptoms Associated with Disease of the Posterior Columns of the Spinal Cord.
By Prof. C. WESTPHAL. *Archiv. für Psychiatrie*, vol. xvi., pp. 498, 778, 1885.

The above case of Prof. Westphal is remarkable not only for the interest inherent in the case itself, but for the masterly analysis of all the symptoms. While some of the symptoms resembled those of multiple sclerosis, there were others which excluded the affection from any of the established forms of spinal-cord diseases. We cannot do better than to give the author's summary of the clinical and pathological aspects of the case.

The patient, a man æt. forty-seven, without any syphilitic or